

INSTALLATION INSTRUCTIONS

Original, 45/95

INSTALLATION INSTRUCTIONS

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Introduction

General

This installation guide has been prepared to provide the basic information necessary to install car kits. This guide is not intended to be definitive, because different types and models of vehicle will require different installation work. The information given is for general guidance only.

The terms of warranty demand that this car kit be installed by an experienced installation facility. An end user should never attempt to install this car kit without professional assistance as the installation requires special tools and knowledge.

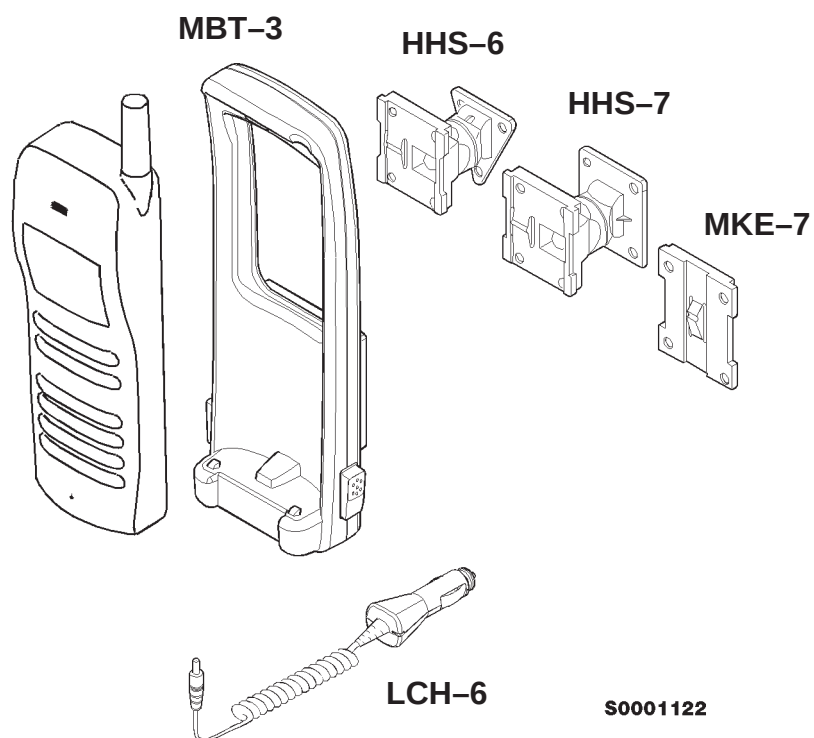
Please refer to the telephone's user guide for instructions on the telephone's operation, care and maintenance, including important safety information.

Note: Read the warnings below before beginning the installation procedure.

WARNINGS

- 1 **ENSURE THAT THE VEHICLE BATTERY IS DISCONNECTED BEFORE YOU START THE INSTALLATION PROCEDURE, AND THAT IT REMAINS DISCONNECTED DURING THE PROCEDURE.**
 - 2 **DO NOT SMOKE OR USE OPEN FLAMES WHEN WORKING NEAR THE VEHICLE'S FUEL SYSTEM.**
 - 3 **ENSURE THAT ELECTRICAL CABLES, HYDRAULIC LINES AND FUEL LINES ARE NOT DAMAGED DURING INSTALLATION.**
 - 4 **ENSURE THAT NORMAL CONTROL AND OPERATION OF THE VEHICLE IS NOT IMPAIRED BY THE INSTALLATION, PARTICULARLY THE BRAKES AND STEERING.**
 - 5 **ALTHOUGH ELECTRONIC SPEED CONTROL, ABS ANTI-LOCK BRAKE AND FUEL INJECTION SYSTEMS ARE RELATIVELY IMMUNE TO MALFUNCTION CAUSED BY NEARBY RADIO TRANSMISSIONS, SHOULD YOU EXPERIENCE FALSE OPERATION OF THESE SYSTEMS OR ARE IN ANY DOUBT WHATSOEVER AS TO THEIR FUNCTIONALITY, PLEASE CONSULT THE VEHICLE DEALER.**
 - 6 **THE CAR KIT IS SUITABLE FOR USE ONLY IN VEHICLES WITH A 11..32 V NEGATIVE GROUNDING. USE ON OTHER SUPPLY VOLTAGES OR ALTERNATIVE POLARITY WILL DAMAGE THE EQUIPMENT.**
 - 7 **THE PHONE SHOULD NOT BE LEFT SWITCHED ON FOR EXTENDED PERIODS WITHOUT RUNNING THE VEHICLE'S ENGINE. FAILURE TO COMPLY COULD DRAIN THE VEHICLE'S BATTERY.**
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CAR KIT A



Product Name:

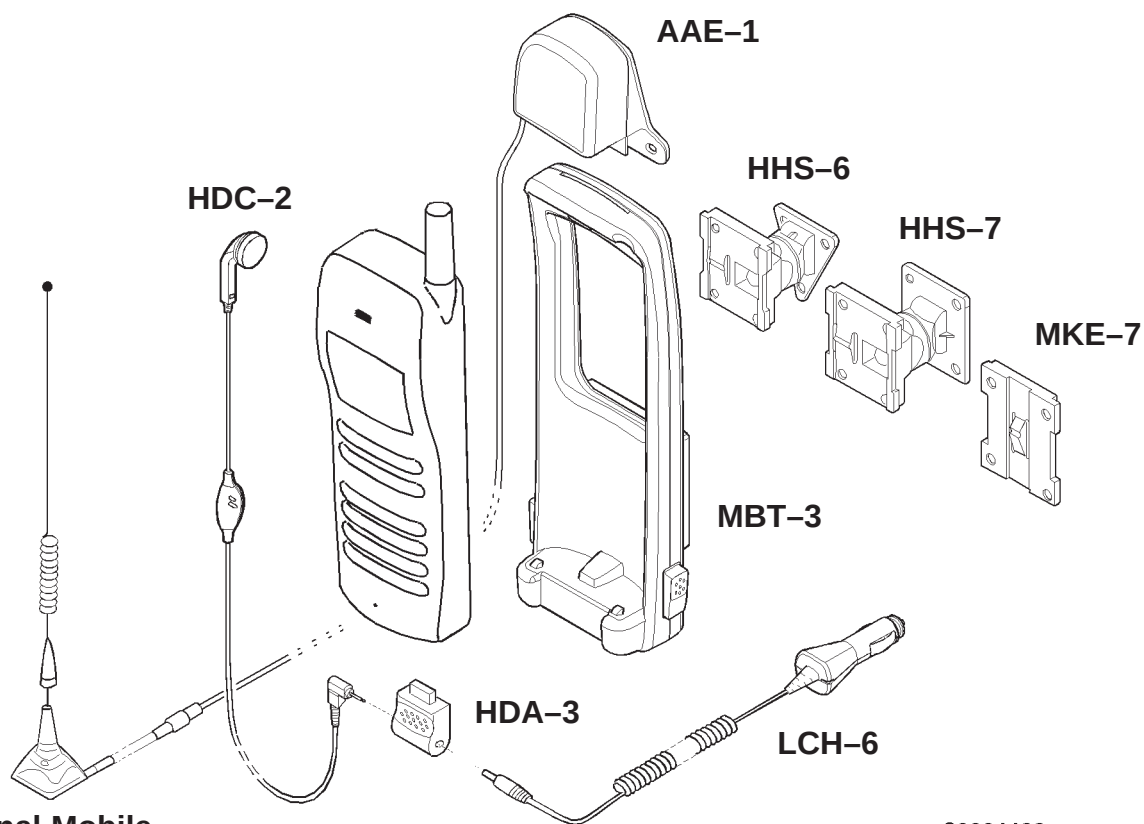
Type:

Code:

Phone Holder
Mounting Plate
Swivel Mounting Plate (with square stand)
Swivel Mounting Plate (with triangular stand)
Cigarette Lighter Charger

MBT-3	0620027
MKE-7	0650007
HHS-6	0650006
HHS-7	
LCH-6	0675076

CAR KIT B

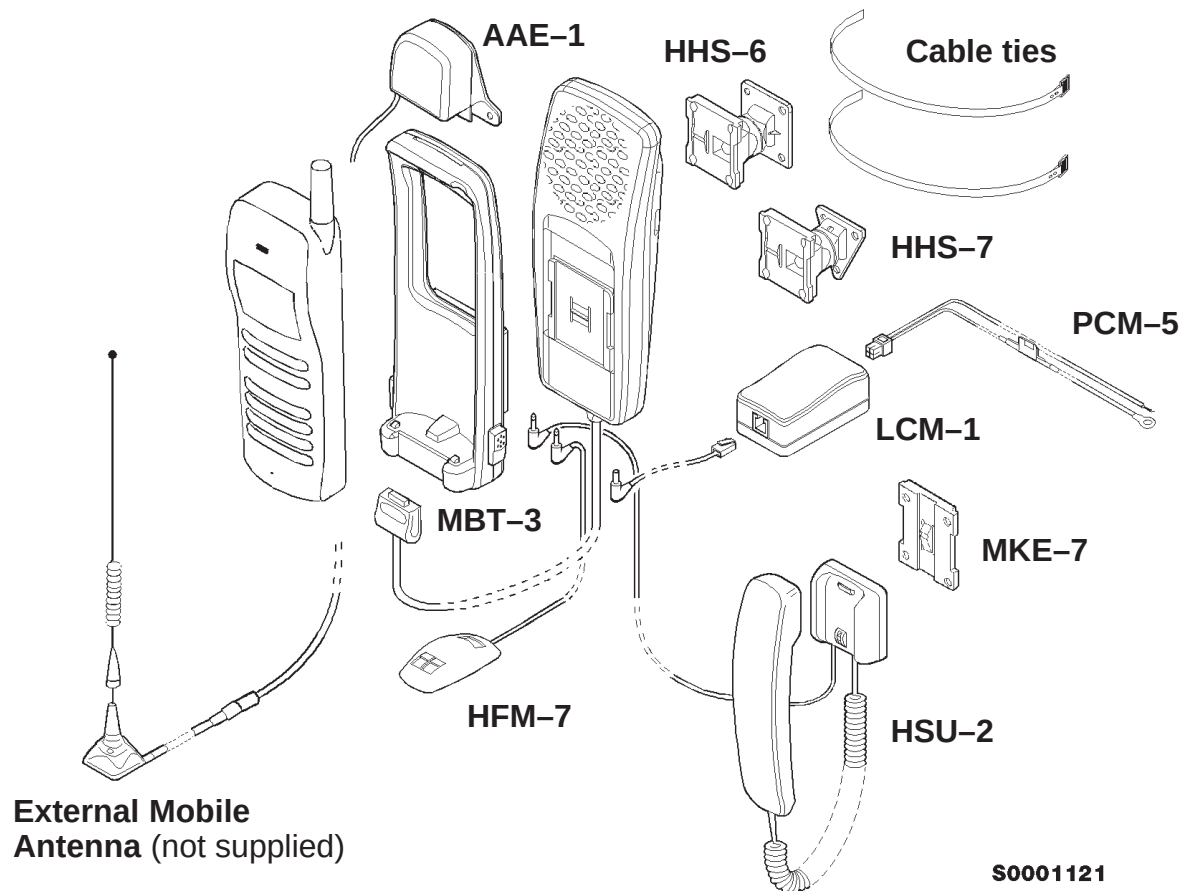


**External Mobile
Antenna** (not supplied)

S0001123

Product Name:	Type:	Code:
Phone Holder	MBT-3	0620027
Mounting Plate	MKE-7	0650007
Swivel Mounting Plate	HHS-6	0650006
Swivel Mounting Plate	HHS-7	
Cigarette Lighter Rapid Charger	LCH-6	0675076
Antenna Coupler	AAE-1	
Headset Adapter	HDA-3	0694029
Headset	HDC-2	0694017

CAR KIT C



Product Name:	Type:	Code:
Phone Holder	MBT-3	0620027
Compact Handsfree Unit	PHF-5	0694028
Mounting Plate	MKE-7	0650021
Swivel Mounting Plate (with square plate)	HHS-6	0650019
Swivel Mounting Plate (with triangular plate)	HHS-7	
Fixed Charger	LCM-1	0675077
Power Cable	PCM-5	0730058
Antenna Coupler	AAE-1	
Handsfree Microphone	HFM-7	0690002
Audio Handset	HSU-2	0640078
Cable ties		
Rapid Cigarette Lighter Charger (optional)	LCH-6	0675076
Headset (optional)	HDC-2	0694017

Component Parts

Phone Holder MBT-3

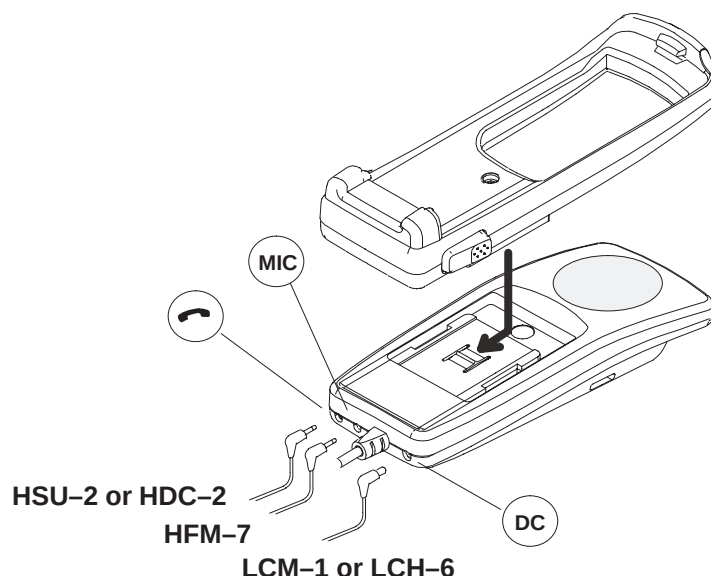
The phone holder allows the phone to be firmly located in a convenient position. The phone holder is attached to the vehicle interior using mounting plate MKE-7 or alternatively swivel mounting plates HHS-6 or HHS-7.

Compact Handsfree Unit PHF-5

The compact handsfree unit enables the phone to operate in handsfree mode. The unit is attached to the vehicle interior using mounting plate MKE-7, or swivel mounting plates HHS-6 or HHS-7. A temporary installation can be achieved using the cable ties supplied.

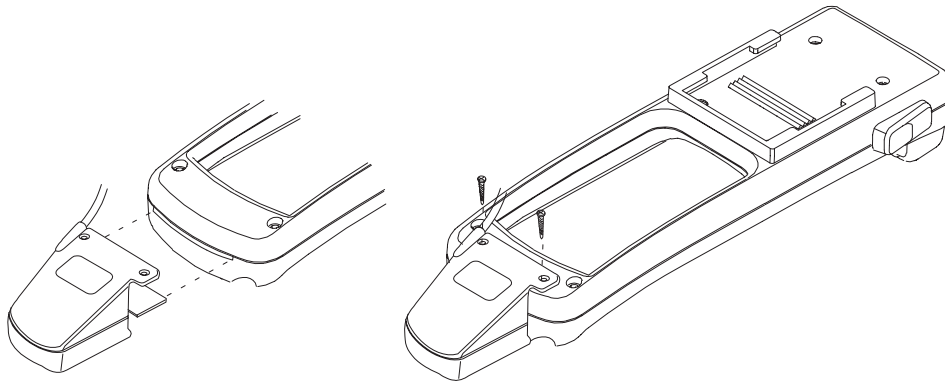
Power is supplied either from the vehicle battery via the fixed charger or from the cigarette lighter socket via the cigarette lighter charger. The compact handsfree unit provides the power supply to the phone via the system connector.

The audio handset, HSU-2, or the headset, HDC-2, connect to the  socket. The HF microphone, HFM-7, connects to the  socket. The phone holder can be attached to the compact handsfree unit as shown.



External Antenna Adapter AAE-1

The external antenna adapter allows an external antenna to be capacitively coupled to the phone's antenna when the phone is located in the mobile holder. The external antenna adapter is fastened to the top of the holder as shown below.



Mounting Plate MKE-7, Swivel Mounting Plates HHS-6 and HHS-7

MKE-7 is a fixed position mounting plate; HHS-6 and HHS-7 are swivel mounting plates which allow for adjustable fixing. All three mounting plates are interchangeable.

Mobile Installation Charger LCM-1

The mobile installation charger provides a power supply for the compact hands-free unit.

Output Power Cable PCC-1

The output power cable connects the mobile installation charger to the compact handsfree unit.

Power Cable PCM-5

The power cable connects the fixed charger to the vehicle supply. The red wire must be connected to the + ve supply controlled by the vehicle's ignition key via the supplied fused connector. The black wire must be attached to a good negative GND connection.

Handsfree Microphone HFM-7

The handsfree microphone connects directly to the compact handsfree unit.

Audio Handset HSU-2

The audio handset is installed using a mounting plate as supplied. The handset connects directly to the compact handsfree unit.

Headset HDC-2

A headset offers privacy during a call. The headset connects to the headset adaptor's socket or the  socket located at the base of the compact handsfree unit.

Headset Adapter HDA-3

The headset adapter provides connections between the headset, power supply and the phone. The adapter plugs into the base of the phone.

The headset adapter provides the power supply for the phone which must be connected to the headset adapter; power is supplied via the cigarette lighter rapid charger.

Cigarette Lighter Rapid Charger LCH-6

The rapid cigarette lighter charger enables the phone to be charged via the vehicle's cigarette lighter socket. The charger connects to the headset adapter via a d.c. jack socket located on the side of the adaptor or the compact handsfree unit via a d.c. jack socket located on the base of the unit marked **DC**. The supply voltage may vary between 11 and 32 V.

External Mobile Antenna (not supplied)

The external antenna adapter is designed to operate with a high quality external antenna. However, due to many different types of antennas being available, an antenna is NOT included as part of car kits. Please, consult the dealer to find out which is the most suitable antenna type for your installation.

Installation

There are some important aspects that require special attention in positioning car kit accessories.

The positioning of the phone holder is the most important factor when trying to achieve the most comfortable position for the user. The location of the holder should be selected so that the visibility of the phone's display is good under all lighting conditions, but not so that the driver's attention is easily distracted. The holder should be located so that the driver can easily reach the keypad. Under no circumstances should the holder prevent the driver from controlling or operating the vehicle in any way or observing traffic.

The handset should be located within easy reach of the user, ensuring that the driver is not prevented from controlling or operating the vehicle in any way or observing traffic.

The fixed charger can be installed in a hidden location, since there is no need to disconnect cables during normal operation. Ensure the location does not subject the unit to moisture or mechanical pressure.

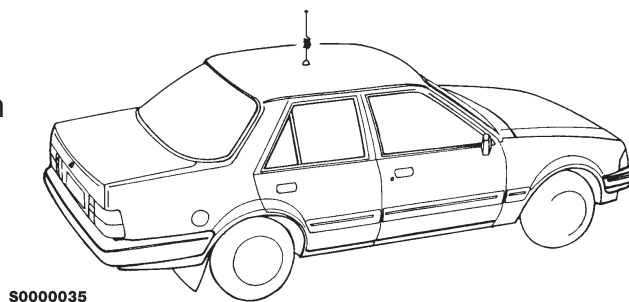
The handsfree microphone can be installed according to the directions in the separate microphone installation guide. Ensure the microphone is as close to the driver's mouth as possible, and attached to a surface that is mechanically quiet. The microphone should be mounted at least 3 ft/1 m away from the handsfree unit speaker to avoid acoustic feedback.

Ensure cables are routed as far away as possible from the vehicle's electronic systems (refer to WARNINGS). Also ensure cables are not subjected to undue mechanical stress e.g. under seats or against sharp edges. The external antenna adapter should always be connected to the antenna via a non-radiating cable (e.g. coax).

The most important component of the installation is the antenna. The location of the antenna as well the quality of the antenna and its installation have a considerable influence to the overall performance of the whole system. Therefore it is necessary to emphasize some aspects, which too often have caused unnecessary service work.

The best place for the antenna is the rooftop. The overall performance of a rooftop antenna is clearly superior to any other antenna type or location. The Antenna shall be mounted in a position such that no part of human body will normally rest too close to any part of the antenna unless there is a an intervening metallic screen, for example, the metallic roof.

- highest place in the car
- proper ground place
- omnidirectional radiation pattern
- minimum risk for disturbances
- user safety



After drilling the hole for the antenna remember to clean the hole from the drilling swarf, so that surface is even. This is needed in order to ensure proper and reliable connection between the ground plane and the antenna. After cleaning it is advised to apply some rust-proofing compound to the hole.

Mount the base of the antenna tightly to its place. Consult the antennas manuals for determining the maximum bending angle before attempting any bending operation.

To avoid drilling a hole in the vehicle's bodywork, a glass-mounted antenna can be chosen and located on the rear window of the vehicle.

Try to route the antenna cable so that possible sources of disturbances are avoided, as well anti-skid brake systems. The shorter the antenna cable, the smaller the attenuation, and the better the performance of the antenna. The antenna coupler should always be connected to the antenna via a non-radiating cable (e.g. coax).

Most of the antennas today have adapted the minigrimp connector system which eliminates the need for special grimping tools and connectors. If however the purchased antenna has traditional connectors, use only proper connectors and tools. The antenna coupler uses TNC-female type antenna connector for reasons of reliability and attenuation.

All installations should take into account any special requirements of the customer. However, should the customer require an installation that is illegal or unsafe these facts must be pointed out to the customer and a policy of non-compliance adopted.

Testing

Once installed, the equipment should be tested to ensure that it is operating satisfactorily and that the position of the units does not impair on the driver's ability to control and operate the vehicle in any way.

Use the phone to make a call when the vehicle is parked with the engine running. During the call, switch off the engine. Ensure that the phone is operational with the engine running and with the engine switched off. For operating information refer to the 'User's Guide' supplied with the phone.

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